

# **Safety Day May 24 2001**

## **Water Safety**



**Boating Safety**  
**Beach and Water Safety**  
**Baby Health and Water Safety**  
**Hypothermia**

# Boating Safety

The theme of the 2001 National Safe  
Boating Campaign is:

**"Boat Smart from the Start. Wear Your  
Life Jacket."**

MANSCEN Safety Office  
Fort Leonard Wood, MO

# References

- ***Missouri State Boating Web Site:***  
**[www.dps.state.mo.us/dps/mswp/wp.htm](http://www.dps.state.mo.us/dps/mswp/wp.htm)**
- ***The U.S. Coast Guard***
- Boatsafe.com

# Agenda

- MO Boating Regulations
  - Boating and Drinking
  - Negligent Operation
- Boating Accidents
  - Reporting Accidents
  - Rendering Assistance
- Boater's Duffel Bag - Being Prepared
  - How To Avoid Trouble
  - How To Signal For Help
- Safety Tips For Trailering Your Boat
- Safety Tips For Water-skiing & Boating

# MO State Boating Regulations

- Blood Alcohol Concentration Intoxication Level .10
- ***Personal Watercraft (PWC) Requirements***
  - Minimum Operator Age **14**
  - Adult Supervision of Minors Required.
  - Operator Education not Required.
  - Life Jacket Required to be worn by **PWC operators, passengers, and children under 7.**
- Restrictions on Towing Skiers: **Must have an observer.**
- Kill Switch Required.

# MO Water-skiing Requirements

- Requires an Observer on Board, **unless boat is equipped with a mirror.**
- Requires a Rear View Mirror, **unless their is an observer on board.**
- Times Prohibited: **From sunset to sunrise.**
- Skier is not Required to Wear a PFD.
- Skier Down Flag Required.
- Restrictions on Skiing:
  - **Skiing while intoxicated is prohibited, and the vessel may not be maneuvered in a manner to allow the skier to collide.**

# Consuming Alcohol While Boating can...

- Diminished judgment, motor skills, peripheral vision, balance, and the ability to process information.
- Slowed reaction and reflexive response time.
- Reduced depth perception, night vision and focus.
- An inner ear disturbance, which can make it impossible for someone suddenly immersed in water to distinguish up from down.
- An accelerated onset of hypothermia, if a person has been consuming alcohol and is immersed in water.



# Booze and Boating Just Don't Mix

- There are several **Myths About Alcohol** that boaters should know:
  - Beer is **NOT** less intoxicating than any other alcoholic beverage.
  - Only time will sober a person, **NOT** black coffee or a cold shower.
  - It is **NOT** easy to tell if someone is impaired. Many experienced drinkers can hide their impairment.
  - You are **NOT** the best person to judge if you are fit to drive. Your judgement is one of the first things you lose when you drink.

# Boating Under the Influence (BUI)

*Operating a vessel while intoxicated became a specific federal offense effective January 13, 1988.*

The final rule set standards for determining when an individual is intoxicated. *If the blood alcohol content (BAC) is .10% (.08% in some states) or higher for operators of recreational vessels being used only for pleasure, violators are subject to a civil penalty not to exceed \$1,000 or criminal penalty not to exceed \$5,000, one year imprisonment or both.*

# Negligent Operation

*Negligent or grossly negligent operation of a vessel which endangers lives and/or property is prohibited by law.* Some examples of actions that may constitute negligent or grossly negligent operation are:

- Operating a boat in a swimming area Operating a boat while under the influence of alcohol or drugs.
- Excessive speed in the vicinity of other boats or in dangerous waters.
- Hazardous water skiing practices.
- Bowriding, also riding on seatback, gunwale, or transom.

# Boating Accidents

*You Are Responsible....There are four conditions that require you to fill out and send in a boating accident report.*

***These are when...***

- a life is lost due to the accident.
- someone is injured and requires medical attention beyond first aid.
- there is damage by or to the vessel and other property.
- any person on board a vessel disappears (under circumstances indicating possible death or injury).

# ***Boating Accidents Include:***

- Capsizing
- Falls  
Overboard
- Collisions
- Fire
- Sinking/Flooding
- Explosions
- Disappearance

# Reports Must Be Filed Within..

- 48 hours of the occurrence if a person dies within one day (24 hours of the accident).
- 48 hours if a person is injured and medical treatment beyond first aid is required.
- 10 days if there is only damage to the vessel and/or property.

**All serious injuries and loss of life must be reported to local authorities immediately!**

# Who Must Fill Out The Form?

- The form is usually filled out by the **operator of the boat** unless the operator is physically unable to complete the form. If that is the case, then the owner of the vessel must submit the form.

To obtain the forms and report the accident, call the state where the vessel number was issued, or the state where the casualty or accident occurred if different.

# Why Must A Report Be Filed?

- The information you supply is used to develop safety regulations and manufacturing standards for the benefit of the boating public.
- The information is also used in boating safety education programs and other boating safety initiatives.
- Without good data, a boating safety hazard might be completely overlooked and other boaters could be hurt or killed.



# Rendering Assistance

*The master or person in charge of a vessel is obligated by law to provide assistance that can be safely provided to any individual in danger at sea.* The master or person in charge is subject to a fine and/or imprisonment for failure to do so.

# Boater's Duffel Bag

## - Being Prepared

- Radio
- Life Jackets (PFDs)
- Fire extinguishers
- Anchor & line
- Basic tools & spare parts
- Sun screen, a hat, sunglasses, foul weather gear...
- Flares & sound signal device
- Compass & chart
- First aid kit  
(prescription medicine and other personal care items you may need)
- Paddle & bailer
- Lights & flashlight

# How To Avoid Trouble

***For your safety and the safety of your***

- Take a nationally recognized ***passengers:*** **boating course**.
- Get a free Courtesy Marine Exam from the Coast Guard Auxiliary.
- Fill your fuel tanks.
- File a float plan.
- Ensure your engine is properly tuned.
- Check your engine compartment for fumes.
- Instruct your passengers on basic safety procedures.
- Always have everyone wear life jackets (PFDs).
- Check your safety equipment.

# How To Signal For Help

- If you are in distress use "MAYDAY, MAYDAY, MAYDAY" on the radio.
- If your situation is not a distress, simply call "Coast Guard." Channel 16 VHF/FM and 2182khz HF/SSB are dedicated distress and calling frequencies monitored at all times.

# Visual Distress Signals For Recreational Boaters

- **Pyrotechnic Devices**

- Must be Coast Guard Approved.
- In working condition, and readily accessible.

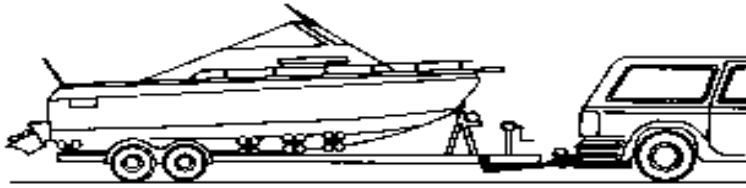
- If **pyrotechnic devices** are selected, a minimum of three are required (3 for day and 3 for night).

- ***U.S.C.G. Approved Pyrotechnic Devices include:***

- Pyrotechnic **red flares**, hand-held or aerial.
- Pyrotechnic **orange smoke**, hand-held or floating.
- Launchers for **aerial red meteors** or parachute flares.

# What To Tell The Coast Guard

- Coast Guard will need the following information:
  - Your location or position.
  - Exact nature of the problem (special problems).
  - Number of people on board.
  - Your boat's name, registration and description.
  - Safety equipment on board.



# Safety Tips For Trailer Your Boat

- Choose the proper trailer for your boat.
- Rollers and bolsters must be kept in good condition to prevent scratching and gouging of the hull.
- Tie-downs and lower unit supports must be adjusted properly to prevent the boat from bouncing on the trailer.
- The bow eye on the boat should be secured with either a rope, chain or turnbuckle in addition to the winch cable.

# Check Before You Go Out On The Highway

- The tow ball and coupler are the same size and bolts with washers are tightly secured. (The vibration of road travel can loosen them.)
- The coupler is completely over the ball and the latching mechanism is locked.
- The trailer is loaded evenly from front to rear as well as side to side.
- The safety chains are attached crisscrossing under the coupler to the frame of the tow vehicle.



# Highway Safety...Check

- The lights on the trailer function properly.
- Check the brakes.
- The side view mirrors are large enough to provide an unobstructed rear view on both sides of the vehicle.
- Check tires (including spare) and wheel bearings. Make certain water from rain or cleaning has been removed from the boat.

# Towing Precautions

- Allow more time to brake, accelerate, pass, and stop.
- Remember the turning radius is also much greater, curbs and roadside barriers must be given a wide berth when negotiating corners.
- Prior to operating on the open road, practice turning, backing up, etc. on a level uncongested parking area.

# Safety Tips For Water-skiing

- **The Ski Area**

Each boat should be able to maintain a 200 foot wide "ski corridor" (100 feet on either side of the boat).

- The entire "skiing course" should be at least 2,000 - 3,000 feet long to avoid constant turning and risky maneuvering.
- ***A minimum depth of five to six feet of obstacle-free water is suggested for safe skiing.***

# Water-skiing....Safety

- When skiing in cooler weather, be aware of the effects of hypothermia.
- As a rule, avoid skiing when the water is rough due to high winds.
- Skiing in the rain is not recommended because of the loss of visibility experienced by the boat operator.

# Safety Tips For Water-Skiers

- The following **tips** will help you safely enjoy this thrilling sport:
  - **ALWAYS have an observer in the boat.** This is a legal requirement in many states. The boat driver cannot watch the skier and operate the boat safely at the same time.
  - **ALWAYS wear a Coast Guard approved Personal Flotation Device (PFD)** designed for water skiing. Ski belts are NOT recommended. Your approved PFD will help keep you afloat.
  - **Never ski in rough water.** High waves or a choppy sea will prevent the tow boat from maintaining a steady course and speed to say nothing of the impact on the skis themselves.

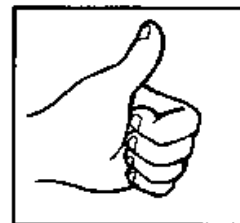
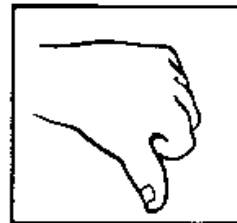
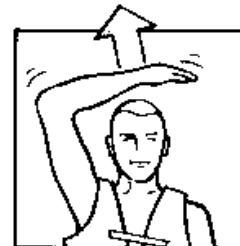
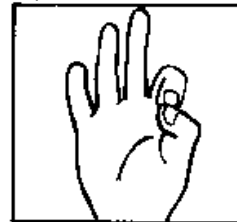
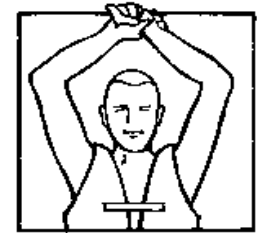
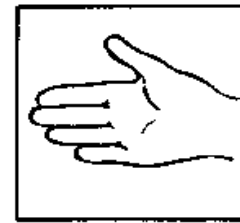
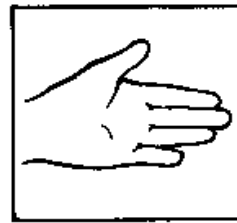
# Water-Skiers...Safety

- **Don't spray or "buzz" swimmers, boats, or other skiers.** Such stunts are dangerous, discourteous, and could cause an unintentional collision.
- **NEVER ski after dark.** It is hazardous AND illegal. Any boat traveling fast enough to tow a skier is traveling too fast to navigate safely at night.
- **NEVER water-ski while under the influence of alcohol or drugs.** Such activity is extremely dangerous because of the impairment to your judgement and ability to respond.

# Water-Skiers...Safety...

- Use hand signals between the skier and observer.

Agree before you start what each signal means so there is no confusion at a critical moment.



# Right of Way

## Right-Of-Way Hierarchy

- **High Priority**

- Vessels not under command. (Anchored, moored, adrift, etc.)
- Vessels restricted in ability to maneuver. (Barges, excursion boats, towing vessels, etc.)
- Sailing vessels under power of sail only.

- **Low Priority**      Power driven vessels. As a power driven vessel you must yield the right-of-way to all the above vessels.



# Defensive Boating

- Defensive boat operation is the key to safe boating.
- **DO NOT** assume you have the right-of-way in any given situation.
- There is one practical "**key**" to defensive boat operation and that key is "**operating distance**."
  - It is strongly suggested that a **100 foot minimum distance** be kept between all vessels.
  - Never make a course change without making a 360 degree survey of the traffic around your boat.



1-800-368-5647

# STOMER INFOLINE

- The Boating Safety Infoline is a toll-free telephone service operated by the U.S. Coast Guard.
- Infoline operators provide callers with information on boating safety recalls and take consumer complaints about possible safety defects.
- Anyone can call the Infoline number toll-free.
- You can get assistance or information by calling this number for the [MO Water Patrol](#) call [573-751-3333](#).

# **MO State Boating Courses**

- The following phone numbers are a good place to call for information on State Boating Safety Classes.  
MO 601-364-2182

# **Beach & Water Safety**



**Tragic water accidents happen quickly. The most common reason for aquatic mishaps is a lack of safety knowledge. The MANSCEN Safety Office recommends the following safety tips:**

- Learn to swim**
- Swim near a lifeguard**
- Never swim alone**
- Supervise children closely, even when lifeguards are present**
- Don't rely on flotation devices, such as rafts, you may lose them in the water**
- If caught in a rip current, swim sideways until free, don't swim against the current's pull**
- Alcohol and swimming don't mix**
- Protect your head, neck, and spine -- don't dive into unfamiliar waters -- feet first, first time**

# **Beach & Water Safety**



## **Safety Tips ( Continued )**

- **If you are in trouble, call or wave for help**
- **Follow regulations and lifeguard directions**
- **Swim parallel to shore if you wish to swim long distances**
- **Scuba dive only if trained and certified -- and within the limits of your training**
- **No glass containers at the beach -- broken glass and bare feet don't mix**
- **No beach fires except in designated areas -- fire residue and superheated sand can severely burn bare feet -- use a barbeque that is elevated off the sand**
- **Report hazardous conditions to lifeguards or other beach management personnel**
- **Stay clear of coastal bluffs, they can collapse and cause injury**



# **Common Hazardous Beach & Ocean Conditions**

**". . . Warning, Warning, Danger,  
Danger!"**

**- Robot, "Lost In Space"**

# Beach & Water Safety



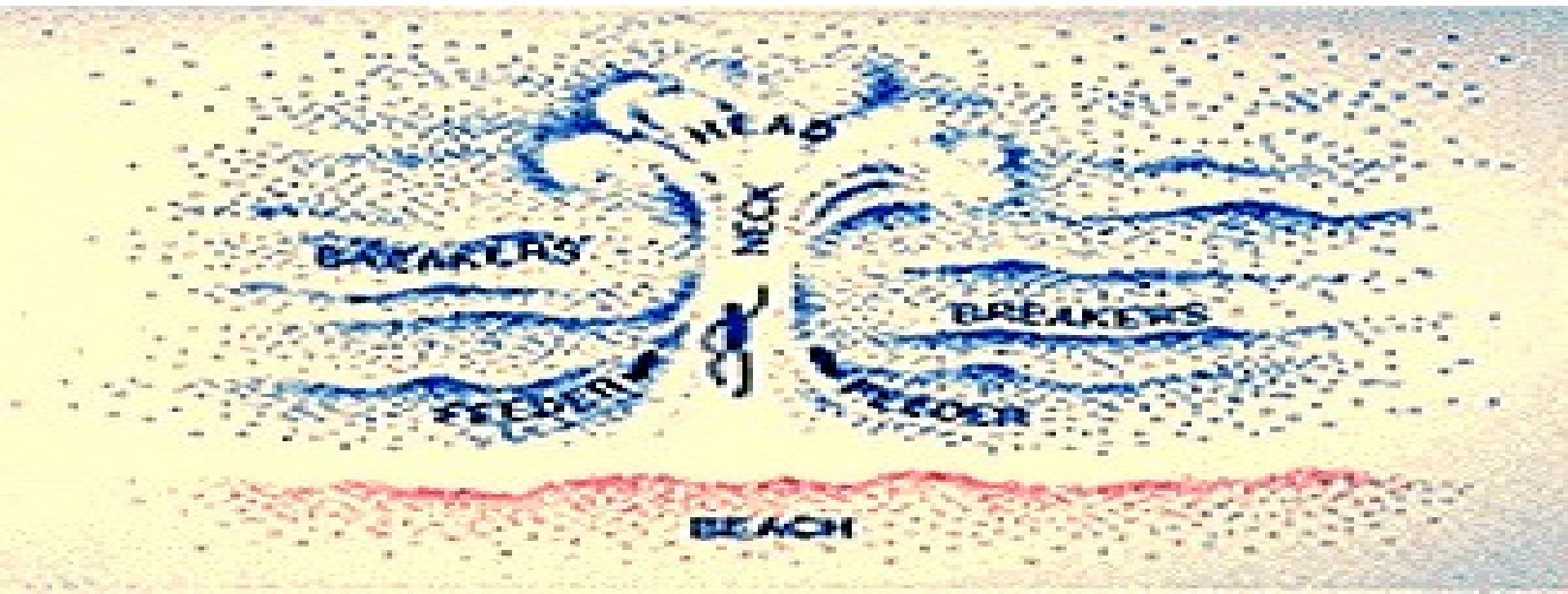
## SHARP CORAL





## Rip Currents

Rip currents are the **most threatening** natural hazard along our coast. They pull victims away from the beach. The United States Lifesaving Association has found that 80% of the rescues effected by ocean lifeguards involve saving those caught in rip currents.





# **Beach & Water Safety**



## **DANGEROUS SHORE BREAK**





## Drowning

**Facts**

If a person is submerged for less than a minute, chances of a full recovery are good. At about three minutes of not breathing oxygen, a person will lose consciousness. Still, prompt CPR can save his or her life. After about three minutes, people can still be revived, but chances of permanent neurological problems increase. After about 10 minutes, the heart stops and chances of any kind of recovery get vanishing small. One of the key variables in surviving submersion is water temperature. The body - particularly the brain - needs less oxygen when it is cooled. In fact, the body is routinely cooled during some types of surgery for this reason. There have been some miraculous recoveries from prolonged submersions because the water was cold. On the other hand, cold water can trigger a fatal irregular heartbeat.

If someone does go under, the key to lifesaving is speed. Resuscitation efforts, consisting of blowing air into the lungs through the mouth, should begin as soon as possible, even as the person is being pulled out of the water. Most experts now agree that the Heimlich maneuver should not be used. The important

# **Baby Health & Water Safety**

- **What are the hazards for our baby while bathing?**

**There are several things to remember when bathing baby, but the most important is to never leave a baby unattended in a bathtub, even for a minute. If the phone rings and you must answer it, wrap the baby in a towel and take him with you.**

- **Cover the tub surface with a rubber suction mat to prevent slipping and only fill the tub with 3 to 4 inches of warm water. Support his back at all times if he can't sit up securely on his own.**
- **Don't allow your child to drink the bath water or submerge his eyes and head. The soap and shampoos could irritate his eyes and intestinal tract.**
- **Keep the toilet lid and bathroom door closed when not in**

# Baby Health & Water

## Safety

- **What are the hazards for our baby of being around water?**

**Water is hazardous for young children. In fact, as much fun as water can be, it's dangerous no matter where you find it — in a bucket, bowl, toilet, tub, sink, puddle, pool, or elsewhere. Parents can avoid tragedy by taking this old adage to heart: **A baby can drown in less than an inch of water.****

**The best way to protect your child from accidental drowning is to remove even the smallest source of water from his play area, and if water is present, don't take your eyes off him for a minute. If you're at a pool or beach, it's fine to let him splash and play to his heart's content — as long as you're watching.**

# Baby Health & Water

## Safety

### • When is it safe to bring my baby to a pool or lake?

**You may want to wait to go to a pool or lake with baby until he can hold his head up on his own (usually by 4 or 5 months). If your baby is old enough to go into the water with you, follow these five water safety steps:**

- Make sure the water is warm enough, preferably between 84 and 87 degrees, Pool water should be properly chlorinated, and natural bodies of water should be nonpolluted and safe for wading.**
- Don't submerge a baby under 6 months. Although infants naturally hold their breath under water, they continue to swallow.**
- Take an Infant/Child CPR course.**
- If you have a plastic wading pool, drain it and store it in an upright position after each use. If you have a permanent pool, make sure it's enclosed with a fence that is at least 4 feet high, and lock the gate leading to the pool after each use. After swimming, remove any toys from the water and deck.**
- Make sure the pool or lake is equipped with rescue equipment and a readily accessible phone for emergencies or take a portable phone to the pool in case of emergency and so you won't be tempted to run into the**

# Baby Health & Water

## Safety

- **When can my baby start taking swimming lessons?**

**There are many infant swim and water safety classes offered nationwide. That doesn't mean it's a good idea to enroll your child in one. According to the American Academy of Pediatrics, swim classes for children shouldn't be started until age 3 because swim classes seem to make both children and their parents overconfident. That doesn't mean you and your baby can't enjoy the water, it's just a bit early to enroll him in lessons.**

**As soon as you start bringing your baby into the water, begin conveying simple water safety rules such as don't go near water without an adult, always swim with a buddy, don't run on the pool deck or boat dock, and jump in feet first. Even babies who are not yet talking understand a great deal more than they let on. One day your child will surprise you by repeating an oft-heard safety phrase, and by the time he's old enough to take lessons, he'll be familiar**

# Baby Health & Water

## Safety

- **What should I do if my baby slips under the surface in a tub, pool, or other body of water?**

- 1. Lift your child out of the water.**
- 2. Carry him with his head lower than his chest.**
- 3. Remove any wet clothing and wrap him in a dry, warm towel or blanket.**
- 4. Call 911 or your local rescue squad or bring your child to the nearest emergency room immediately. (Even if he appears fully recovered, he may have inhaled water, which could cause lung damage.)**
- 5. If he's unconscious, assess his condition, breathing, and pulse. If he's not breathing, open his airway and begin mouth-to-mouth and nose resuscitation. If he has no pulse or breathing, begin Infant/Child CPR.**

# ***Hypothermia***

- Hypothermia is subnormal temperature within the central body
- Survival in cold water
- Large people vs. small people.
- Swimming or treading water



# ***Hypothermia***

- Average persons survival Time
- Accidental immersion in cold water
- Wearing a PFD ( Life Jacket ) is a **MUST**.  
( It will keep you afloat even if you are unconscious )

# ***Hypothermia***

- Should you swim to shore?
- Distances can be deceptive!

# ***Hypothermia***

## **Treatment:**

- 1. Move the victim to shelter and warmth as rapidly as possible.**
- 2. Gently remove wet clothing. The feeble amount of heat energy the victim has left must not be expended on warming and drying wet clothing.**
- 3. Apply heat to the central core of the body(head, neck,sides, and groin). Place the victim on a hard surface, this will allow the administration of cardiopulmonary resuscitation should the need arise.**
  - A. Rap warm moist towels - or other textiles around the victim's head, neck, sides, and groin. As the packs cool rewarm them by adding warm water (about 150 F). Check the**

# ***Hypothermia***

***( Continued )***

## **Treatment:**

**B. Hot water bottles and heated blankets can also be used.**

**C. An effective field measure is for one or two of the rescuers to remove their own clothing, using their bodies to warm the victim's naked body. A sleeping bag or blanket should be used to conserve the body heat.**

**D. If the victim appears dead, heart massage and mouth to mouth resuscitation should be administered. Never put an unconscious victim in a bathtub. In cases of mild hypothermia, dry clothing and shelter may be all that is needed before the victim appears normal. However all hypothermia victims should be seen by a doctor.**

# ***Hypothermia***

***( Continued )***

## ***DO NOTS:***

- 1. Do not give the victim anything to drink, especially not alcohol.**
- 2. Do not rub frozen body areas, especially not with snow.**
- 3. Do not wrap a hypothermic in a blanket without an auxiliary source of heat unless it is to protect him from further heat loss before treatment.**

**"The United States Coast Guard knows how quickly cold water kills. And with the average body temperature of 98.6 Fahrenheit, the water does not have to be all that cold to be very dangerous.**

# ***Hypothermia***

( Continued )

## ***Expected Cold Water Survival***

***Temp Fahrenheit-----Exhaustion/Unconscious-----***  
***Expected Survival***

32.5-----<15 min.  
----- 10 to 45 min.

32.5 - 40----- 15 - 30 min.  
----- 39 to 90 min.

40 - 50----- 30 - 60 min.  
----- 1 to 3 Hours

50 - 60----- 1 - 2 Hours  
----- 1 to 6 Hours

60 -70----- 2 - 7 Hours